

What is claimed is:

1. An image forming apparatus comprising:

an exposure unit which exposes an image carrier by emitting light of light emitting elements based on image data;

an input device for inputting distortion data of the exposure unit; and

a controller which controls an exposure position of an image to be exposed by the exposure unit, based on the input distortion data.

2. The image forming apparatus according to claim 1, wherein the exposure unit includes a plurality of the light emitting elements that are arranged in a line.

3. The image forming apparatus according to claim 2, wherein data corresponding to each of the light emitting elements are input.

4. The image forming apparatus according to claim 1, wherein the input device is an operation panel operated by a user.

5. The image forming apparatus according to claim 1, wherein the input device is equipped with plural kinds of input methods.

- (6) An image forming unit comprising:

an exposure unit which exposes an image carrier by emitting light of light emitting elements based on image data;

a transfer unit which transfers a latent image created on said image carrier as a revealed image onto a transfer body;

an input device for inputting distortion data of the exposure unit;

at least two optical sensors which read out resist patterns formed on said transfer body;

a data processor which forms skew correction data based on a relative deviation amount in main and sub scanning directions of the exposure unit, that is obtained by a readout of the resist patterns by the optical sensors; and

a controller which controls an exposure position of an image by the exposure unit, based on the distortion data input in the input device and skew correction data.

7. The image forming apparatus according to claim 6, wherein the exposure unit includes a plurality of the light emitting elements that are arranged in a line.

8. The image forming apparatus according to claim 7, wherein data corresponding to each of the light emitting elements are input.

9. The image forming apparatus according to claim 7, wherein each of the optical sensors is arranged in a position at a predetermined distance in the main-scanning direction from a center position of the arrangement of the light emitting elements.

10. An image forming apparatus comprising:

an exposure unit which exposes a recording medium by emitting light of light emitting elements based on image data, thereby forming an image;

a memory device which stores distortion data of the exposure unit;

a resist pattern forming device which forms resist patterns

on the recording medium;

sensors which read out the resist patterns formed by the resist pattern forming device; and

a controller which determines recording positional deviation data of the exposure unit based on the read-out result of the resist patterns by the sensors, and controls exposure positions of the image to be exposed by the exposure unit based on the recording positional deviation data and distortion data.

11. The image forming apparatus according to claim 10, wherein the exposure unit includes a plurality of the light emitting elements that are arranged in a line.

12. The image forming apparatus according to claim 11, wherein data corresponding to each of the light emitting elements are input.

13. The image forming apparatus according to claim 11, wherein each of the sensors is arranged in a position at a predetermined distance in the main-scanning direction from a center position of the arrangement of the light emitting elements.

14. The image forming apparatus according to claim 10,

wherein a plurality of the exposure units are provided for forming color images;

wherein an image storage device for storing image data is further provided; and

wherein the controller corrects linear distortion of the exposure units, using distortion data input from the input device,

and then forms the resist patterns on the transfer body by means of the resist pattern forming device, to thereby relatively detect the positional deviation of the images in the exposure units with respect to the image in the reference exposure unit by means of the optical sensor device, and execute address control of the image storage device so as to correct the positional deviation of the images based on the detected result.

15. The image forming apparatus according to claim 10,

wherein the controller corrects linear distortion of the exposure units, and thereafter corrects the positional deviation of the images.